Quick Reference Guide

Bosch Gas Hot Water Systems

BOSCH
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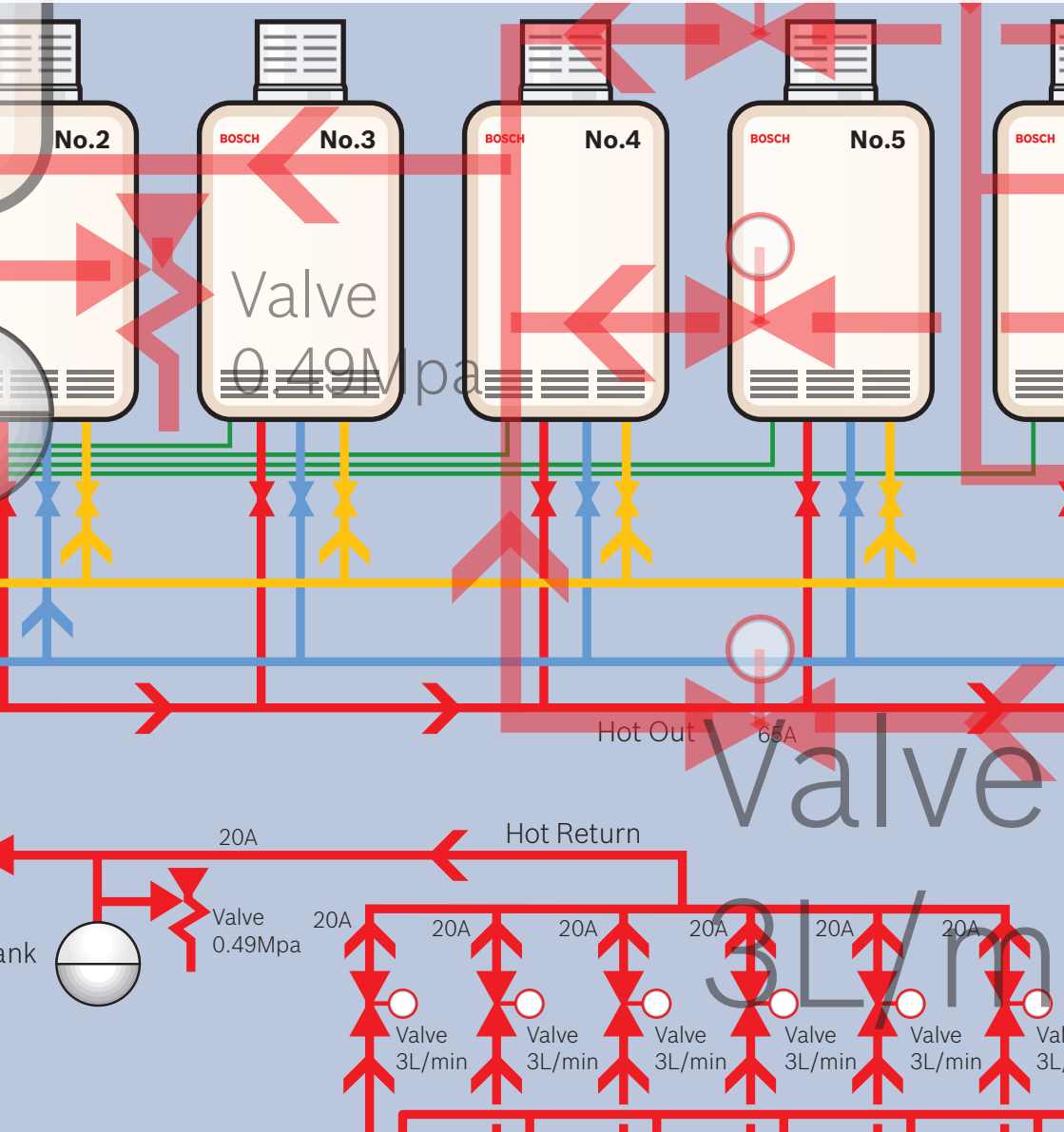

Bosch has been delivering hot water to Australian and New Zealand households for over 50 years. Manufacturing continuous flow water heaters since the 1930's, Bosch has secured a name synonymous with quality and innovation that continues to drive the company today.

The Bosch mission is to deliver the most reliable and efficient hot water appliances to fit the lifestyles of today's modern households. As a result, Bosch now offers the largest range of continuous flow gas hot water systems on the market.

This quick reference guide has been designed for specifiers, tradespersons, architects and retail staff involved in the selection, sizing and installation of Bosch gas hot water systems.

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1 Bosch continuous flow gas hot water systems

1.1 Range overview

All Bosch hot water systems are continuous flow gas hot water systems, which means they only heat the required water on demand. They are wall-hung, easy to install and much smaller than conventional storage systems.

Highflow
- ▶ 17, 21 and 26 litres per minute
- ▶ External installation only
- ▶ Antifrost as standard
- ▶ 50°C limited models available in Australia (standard model: 55°C)
- ▶ Up to 4 optional controllers can be installed for precise temperature control, increased energy efficiency and water saving features
- ▶ Minimum 5.5 star energy efficiency

32 Series
- ▶ 32 litres per minute
- ▶ External or internal* installation
- ▶ Suitable for large homes and commercial applications
- ▶ Up to 3 optional controllers can be installed for precise temperature control (with KM3211WH models)
- ▶ Additionally, the 32Q model includes a built-in pump and a main controller, which allows for programmed water re-circulation into the hot water supply line
- ▶ Outstanding energy efficiency and safety features

**Internal installations require flueing as per AS 5601 or NZ 5621, respectively. Flue kits available from Bosch for 32 Series. For more information, please see page 17.*
***Pilot gas hot water systems not available in New Zealand.*

External HydroPower
- ▶ 10, 13 and 16 litres per minute
- ▶ External installation only
- ▶ Exclusive to Bosch – lighting a flame with water!
- ▶ Forget about installing a power point, replacing batteries, or lighting a pilot light
- ▶ Easy installation

Internal HydroPower
- ▶ 10, 13 and 16 litres per minute
- ▶ Internal* installation only
- ▶ Ideal for frost prone areas
- ▶ No batteries, matches or power supply needed for ignition
- ▶ Easy installation

Pilot Ignition**
- ▶ 10, 13 and 16 litres per minute
- ▶ External installation only
- ▶ Standing pilot light
- ▶ Easy installation

1.2 Technical specifications

1.2.1 Electronic gas hot water systems

Highflow range

	Models		
	Highflow 17e	**Highflow 21e**	**Highflow 26e**
Part number	YS1770RA	YS2170RA	YS2670RA
50°C limited (MP52)*	YS1770RA5*	YS2170RA5*	YS2670RA5*
Ignition type	Electronic	Electronic	Electronic
Flow rate L/min (25°C rise)	17	21	26
Flow rate L/min (50°C rise)	8.5	10.5	13
Mj/h	135	170	200
Star rating	5.66	5.56	5.53
Antifrost	Standard	Standard	Standard
Installation	External	External	External
Air supply / exhaust	Power Flued	Power Flued	Power Flued
Gas type	NG/LPG	NG/LPG	NG/LPG
Gas supply pressure (kPa)	NG: 1.13 – 3.0	NG: 1.13 – 3.0	NG: 1.13 – 3.0
	LPG: 2.75 – 3.0	LPG: 2.75 – 3.0	LPG: 2.75 – 3.0
Min. inlet water pressure for max. flow (kPa)	100	130	230
Max. allowable inlet water pressure (kPa)	1,000	1,000	1,000
Min flow rate (L/min)	2.5	2.5	2.5
Electricity			
Supply (VAC)	230 - 240, 50 Hz (10 amp weatherproof power point recommended within 500 mm of the unit)		
Power Consumption (watts)	In use: 40	In use: 45	In use: 51
	Antifrost: 129	Antifrost: 129	Antifrost: 129
Pipe Connection Sizes			
Gas NG (mm)	20 (3/4")	20 (3/4")	20 (3/4")
Gas LP (mm)	20 (3/4")	20 (3/4")	20 (3/4")
Cold Water (mm)	20 (3/4")	20 (3/4")	20 (3/4")
Hot Water (mm)	20 (3/4")	20 (3/4")	20 (3/4")
Unit Dimensions			
Height (mm)	520	520	600
Width (mm)	350	350	350
Depth (mm)	170	170	170
Carton weight (in kg)	18	19	22
Domestic Warranty			
Parts and labour	3 years		
Heat exchanger	10 years (part only)		
Temperature controllers	3 years (parts and labour)		
Optional Temperature Controllers			
Main controller	Standard: YPRM66XB**; Premium: YPRM67XB		
Bathroom controller	Standard: YPRS66XB**; Premium: YPRS67XB		
Sub-controller	YPRP62XB		
Accessories			
Lockable recess box	17 and 21e: RBHF50L**, 26e: RBHF26L**		
Fully enclosed recess box	FERB70**, RBHF304WDA***		
Pipe cover	YPHC304		

** 50°C limited Highflow models only available in Australia. These units comply with Australian Standards 3489-2003 (licence number IPC20002). They have been specifically designed for applications, which require a maximum water temperature of 50°C. This eliminates the need for mechanical tempering valves.*

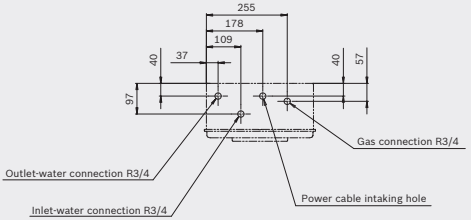
*** Only available in Australia.*

**** Only available in New Zealand.*

50°c
This appliance delivers water NOT EXCEEDING 50°C in accordance with AS3498. Refer to AS/NZ3500, local requirements and installation instructions to determine if additional delivery temperature control is required.

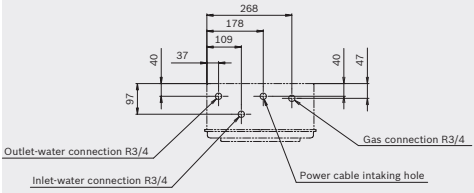
Connection dimensions – View from the top

17e & 21e



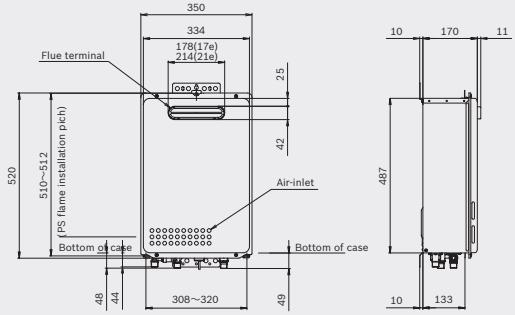
Connection dimensions – View from the top

26e



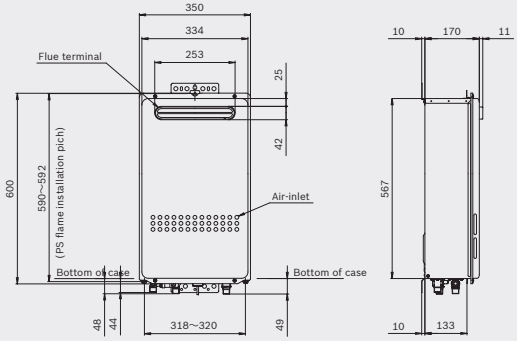
Product diagram

17e & 21e



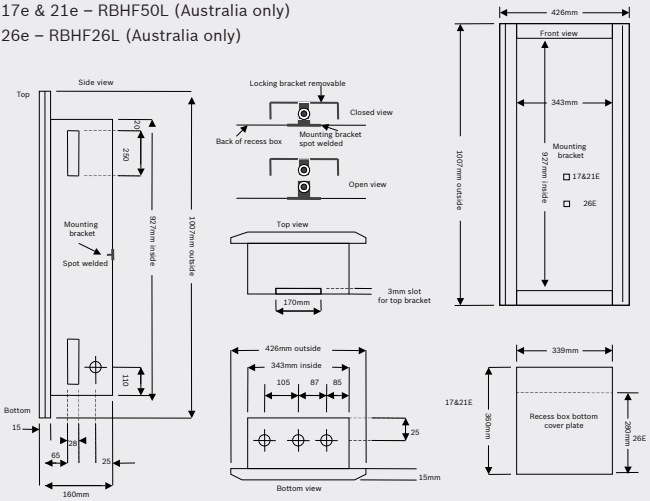
Product diagram

26e



Product diagram

Recess boxes for Highflow series
17e & 21e – RBHF50L (Australia only)
26e – RBHF26L (Australia only)

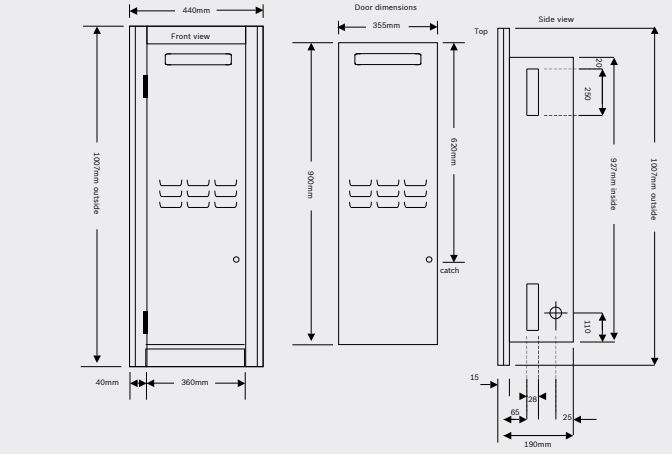


Brick opening dimensions (mm)*	
Height	930
Width	345
Depth	145

*Minimum dimensions

Product diagram

Fully enclosed recess box
FERB70 (Australia only)

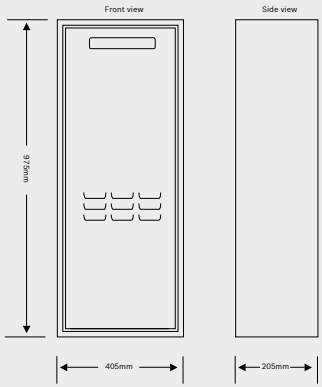


Brick opening dimensions (mm)*	
Height	930
Width	365
Depth	175

*Minimum dimensions

Product diagram

Fully enclosed recess box
RBHF304WDA (New Zealand only)



Brick opening dimensions (mm)*	
Height	980
Width	405
Depth	205 (if fully recessed)

*Minimum dimensions

The all new Highflow range represents the technological pinnacle of water heating. The new electronic series lets you enjoy uncompromised quality, higher capacities and even more temperature controllers.

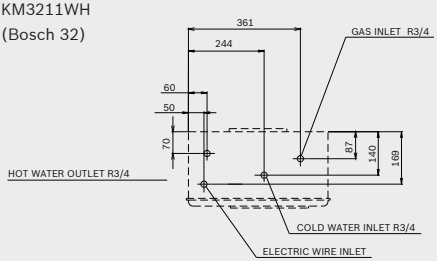
32 Series (for large homes and commercial applications)

**Internal installations require flueing as per AS 5601 / NZ 5621. Flue size: 100 mm. Flue kits available for 32 Series. For more information, please see page 17.*

	Models	
	Bosch 32	**Bosch 32Q**
Part number	KM3211WH	KM3211WHQ
Ignition type	Electronic	Electronic
Flow rate L/min (25°C rise)	32	32
Flow rate L/min (50°C rise)	16	16
Gas input - low (Mj/h)	25	25
Gas input - high (Mj/h)	250	250
Star rating	4.8	4.8
Antifrost	Standard	Standard
Installation	Internal* or External	Internal* or External
Air supply / exhaust	Power Flued	Power Flued
Gas type	NG / LP	NG / LP
Gas supply pressure (kPa)	NG: 1.13 – 3.0	NG: 1.13 – 3.0
	LPG: 2.75 – 3.0	LPG: 2.75 – 3.0
Min. inlet water pressure for max. flow (kPa)	200	200
Max allowable inlet water pressure (kPa)	900	900
Min. flow rate (L/min)	3.5	3.5
Electricity		
Supply (VAC)	230 - 240, 50 Hz (10 amp weatherproof power point recommended within 500 mm of the unit)	
Power consumption (watts)	In use (NG): 100	In use (NG): 135
	In use (LPG): 115	In use (LPG): 150
	Antifrost: 115	Antifrost: 140
Pipe Connection Sizes		
Cold water inlet (mm)	20 (3/4”)	20 (3/4”)
Hot water outlet (mm)	20 (3/4”)	20 (3/4”)
Hot water return (mm)	-	15 (1/2”)
Gas inlet (mm)	20 (3/4”)	20 (3/4”)
Unit Dimensions		
Height (mm)	615	615
Width (mm)	464	464
Depth (mm)	240	240
Weight (kg)	29	32
Warranty		
Domestic	3 years parts and labour	3 years parts and labour
	10 years heat exchanger (part only)	10 years heat exchanger (part only)
Commercial	2 years parts and labour	2 years parts and labour
	5 years heat exchanger (part only)	5 years heat exchanger (part only)
Optional Temperature Controllers		
Main controller	RCM3211 (included with 32Q)	
Sub-controller	RCS3211	
Flueing		
Vent cap	KMVC100	
Vertical flue kit	FKV32LTR	
Horizontal flue kit	FKH32LTR (requires vent cap KMVC100)	
Accessories		
Quick connection cable	KMQC0703339 (for 2 units in manifold)	
System controller	KMSC201 (for 3-6 units in manifold)	
3m cable for system controller	0700073	
5m cable for system controller	0700074	

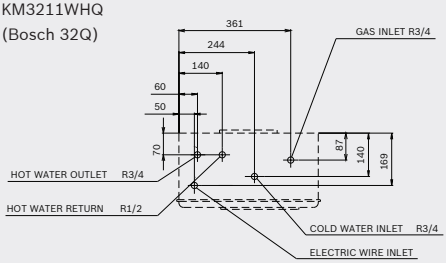
Connection dimensions – View from the top

KM3211WH
(Bosch 32)



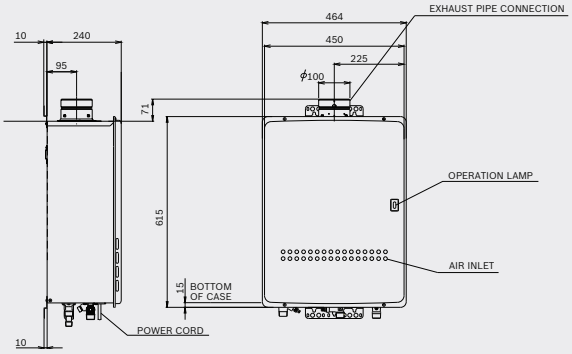
Connection dimensions – View from the top

KM3211WHQ
(Bosch 32Q)



Product diagram*

KM3211WH & KM3211WHQ



**All dimensions are in mm. Dimensions are identical for KM3211WH and KM3211WHQ; KM3211WHQ shown.*

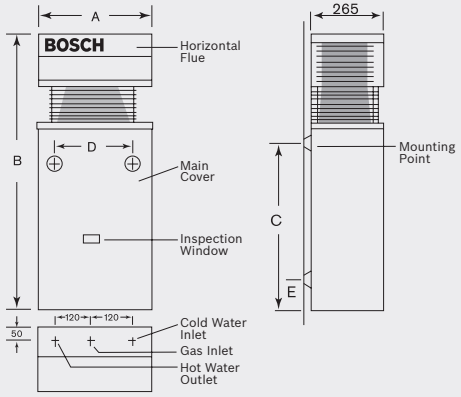
External HydroPower range

**An exogel valve is recommended for areas that drop to 0°C for short periods. In areas prone to extended periods of frost and sub-zero temperatures, only Internal HydroPower models, external Highflow models and 32 Series models are suitable.*

	Models		
	Bosch 10H	**Bosch 13H**	**Bosch 16H**
Part number	TF250-8G	TF325-8G	TF400-8G
Ignition type	HydroPower	HydroPower	HydroPower
Flow rate L/min (25°C rise)	10	13	16
Flow rate L/min (50°C rise)	5	6.5	8
Mj/h	79	104	130
Star rating	5.1	4.6	5.0
Installation	External	External	External
Air supply/ exhaust	Natural draft	Natural draft	Natural draft
Gas type	NG/LPG	NG/LPG	NG/LPG
Gas supply pressure (kPa)	NG: 1.13 – 3.0 LPG: 2.75	NG: 1.13 – 3.0 LPG: 2.75	NG: 1.13 – 3.0 LPG: 2.75
Min. inlet water pressure for max. flow (kPa)	60	100	130
Max. allowable inlet water pressure (kPa)	800	800	800
Min. flow rate (L/min)	3.5	3.5	3.5
Pipe Connection Sizes			
Gas NG (mm)	20 (3/4”)	20 (3/4”)	20 (3/4”)
Gas LP (mm)	15 (1/2”)	15 (1/2”)	15 (1/2”)
Cold water inlet (mm)	15 (1/2”)	15 (1/2”)	15 (1/2”)
Hot water outlet (mm)	15 (1/2”)	15 (1/2”)	15 (1/2”)
Unit Dimensions			
Height (mm)	845	845	936
Width (mm)	405	405	460
Depth (mm)	265	265	265
Carton weight (kg)	21	22	25
Warranty			
Parts and labour	2 years		
Heat exchanger	10 years (part only)		
Accessories			
Heat shield	9 708 061 400.ZG1		
Exogel valve (Antifrost)*	H707 060 151*		

	Dimensions		
	10H (mm)	**13H (mm)**	**16H (mm)**
A	405	405	460
B	845	845	936
C	533	533	533
D	240	240	240
E	68	68	82

Product diagram



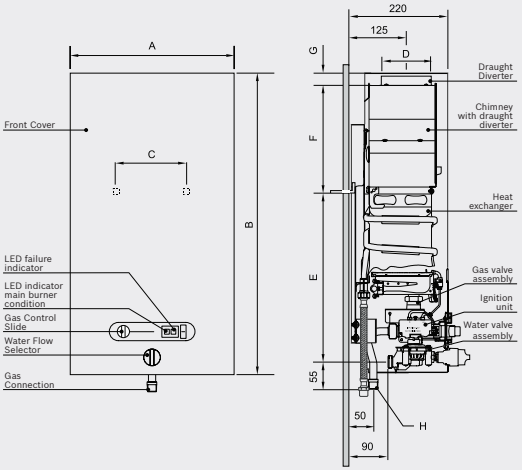
Internal HydroPower range

** Internal installations require flueing as per AS 5601 respectively NZ 5621.*

	Models		
	Bosch 10H	**Bosch 13H**	**Bosch 16H**
Part number	WR250-8G	WR325-8G	WR400-8G
Ignition type	HydroPower	HydroPower	HydroPower
Flow rate L/min (25°C rise)	10	13	16
Flow rate L/min (50°C rise)	5	6.5	8
Mj/h	79	104	127
Star rating	4.5	4.8	4.6
Installation	Internal*	Internal*	Internal*
Air supply/ exhaust	Natural draft	Natural draft	Natural draft
Gas Type	NG/LPG	NG/LPG	NG/LPG
Gas supply pressure (kPa)	NG: 1.13 – 3.0	NG: 1.13 – 3.0	NG: 1.13 – 3.0
	LPG: 2.75	LPG: 2.75	LPG: 2.75
Min. water pressure for Max. flow (kPa)	60	100	130
Max. allowable inlet water pressure (kPa)	800	800	800
Min. flow rate (L/min)	3.5	3.5	3.5
Pipe Connection Size			
Gas NG (mm)	20 (3/4”)	20 (3/4”)	20 (3/4”)
Gas LP (mm)	15 (1/2”)	15 (1/2”)	15 (1/2”)
Cold water inlet (mm)	15 (1/2”)	15 (1/2”)	15 (1/2”)
Hot water outlet (mm)	15 (1/2”)	15 (1/2”)	15 (1/2”)
Unit Dimensions			
Height (mm)	680	755	755
Width (mm)	360	400	460
Depth (mm)	220	220	220
Carton weight (kg)	12.5	16	20
Warranty			
Parts and labour	2 years		
Heat exchanger	10 years (part only)		

		Dimensions		
		10H (mm)	**13H (mm)**	**16H (mm)**
A		360	400	460
B		680	755	755
C		228	228	334
D		115	140	140
E		462	500	530
F		162	196	166
G		25	30	30
H	**LPG**	R1/2”	R1/2”	R1/2”
	NG	R3/4”	R3/4”	R3/4”

Product diagram



Flue Kits**
Flue kits to suit Internal HydroPower appliances:
100mm to suit internal 10H
125mm to suit internal 13H & 16H
***Not supplied by Bosch. Flueing available from plumbing supply stores*

1.2.3 Pilot gas hot water systems*

	Models		
	Bosch 10P	**Bosch 13P**	**Bosch 16P**
Part number	TF250	TF325	TF400
Ignition type	Standing pilot	Standing pilot	Standing pilot
Flow rate L/min (25°C rise)	10	13	16
Flow rate L/min (50°C rise)	5	6.5	8
Mj/h	82	100	130
Star rating	4.6	3.9	4.3
Installation	External	External	External
Air supply/ exhaust	Natural draft	Natural draft	Natural draft
Gas type	NG/LPG	NG	NG
Gas supply pressure (kPa)	NG: 1.13 – 3.0 LPG: 2.75	NG: 1.13 – 3.0	NG: 1.13 – 3.0
Min. water pressure for max. flow (kPa)	NG: 90 LPG: 55	NG: 100	NG: 150
Max. allowable inlet water pressure (kPa)	1200	1200	1200
Min. flow rate (L/min)	5.0	2.0	2.0
Pipe Connection Size			
Gas NG (mm)	20 (3/4”)	20 (3/4”)	20 (3/4”)
Gas LP (mm)	15 (1/2”)	n/a	n/a
Cold Water (mm)	15 (1/2”)	15 (1/2”)	15 (1/2”)
Hot Water (mm)	15 (1/2”)	15 (1/2”)	15 (1/2”)
Unit Dimensions			
Height (mm)	845	845	936
Width (mm)	405	405	460
Depth (mm)	265	265	265
Carton weight (kg)	21	22	24
Warranty			
Parts and labour	2 years		
Heat exchanger	10 years (part only)		
Accessories			
Heat shield	9 708 061 400.ZG1		
Exogel valve (Antifrost)**	H707 060 151**		

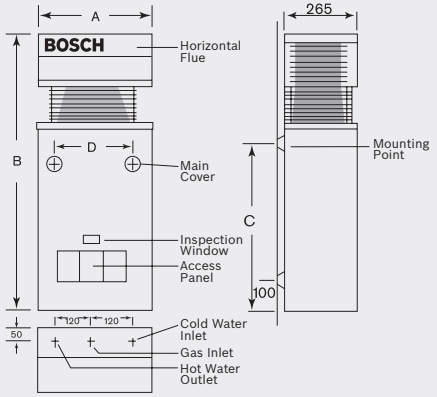
**Pilot range is not available in New Zealand.*

***An exogel valve is recommended for areas that drop to 0°C for short periods.*

In areas prone to extended periods of frost and sub-zero temperatures, only Internal HydroPower models, external Highflow models and 32 Series models are suitable.

	Dimensions		
	10P (mm)	**13P (mm)**	**16P (mm)**
A	405	405	460
B	845	845	936
C	533	533	550
D	240	240	240

Product diagram



2 Commercial gas hot water systems

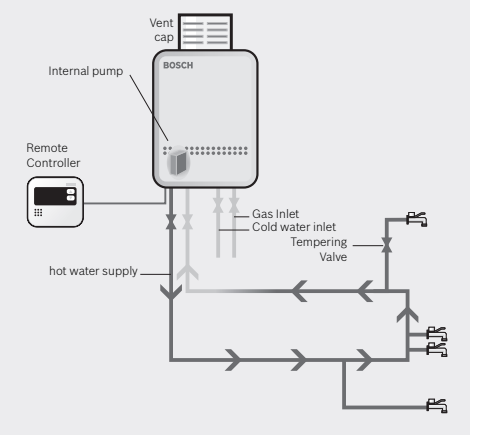
2.1 32 Series – commercial applications

Benefits of the 32 Series for commercial applications

- The 32 Series is designed specifically for commercial use. A flow rate of 32 litres per minute at a 25°C temperature rise makes the 32 Series a true commercial hot water system.
- The 32 Series has a coated copper heat exchanger to prevent corrosion and deterioration. The internal copper piping is 25% thicker than standard domestic models for extra durability.
- Depending on the water volume required, the Bosch 32 models (KM3211WHNG/LP) can be installed as a single unit, manifold (see chapter 2.3) or are delivered as part of a Bosch Professional Pack, a pre-assembled system including a 315 litre stainless steel storage tank (see chapter 2.2).
- External or internal* installation options make the 32 Series conveniently versatile.
- Up to 3 optional temperature controllers can be installed with a Bosch 32 model (KM3211WHNG/LP only): 1 main controller (RCM3211) and up to 2 sub-controllers (RCS3211).
- Additionally, the 32Q model (KM3211WHQNG/LP) includes a built-in pump and a main controller, which allows for programmed water re-circulation on a ring main e.g. for peak usage times. The delivery time of hot water is reduced as well as unnecessary water usage.

**Internal installations require flueing as per AS 5601 / NZ 5621. Flue kits are available for 32 Series.*
For more information, please see page 17.

Product diagram



The 32Q model allows for programmed water re-circulation on a ring main. The maximum length of the re-circulation pipe is 60m.

2.2 Professional Packs

Professional Packs are specifically designed for commercial use. They are suitable for applications that require a large volume of hot water for peak demand. All Bosch Professional Packs come with the following components – Bosch hot water system, Bosch-Everlast stainless steel storage tank, built-in thermostat, shroud, PTR valve and pump. They are pre-assembled, ready to be installed and will be shipped directly to site. This means an easy installation and low set-up costs.

The 315 litre Bosch-Everlast stainless steel storage tank included in Bosch Professional Packs comes standard with 32mm ports. Bosch-Everlast stainless steel storage tanks can also be purchased separately. A 315 litre model with 32 mm ports (part number: 315C2) as well as a 315 litre model with 50mm ports (part number: 315C250) is available. The 315C250 storage tank is not available as part of a Bosch Professional Pack.

Model C31532WHNG (with shroud)

Model C31532WHNG (without shroud; vent cap KMVC100 as shown is a required accessory for external installations)

Bosch Professional Packs come in the following system-tank combinations:

	Models			
	C31526ELP	**C31526ENG**	**C31532WHLP**	**C31532WHNG**
Gas Type	LP	NG	LP	NG
Tank Size (ltr)	315	315	315	315
System Size	26e	26e	32	32

Internal installation:
C31532WHLP and C31532WHNG may be installed internally with appropriate flueing. Please consult AS 5601 or NZ 5621.

2.3 Manifolding options

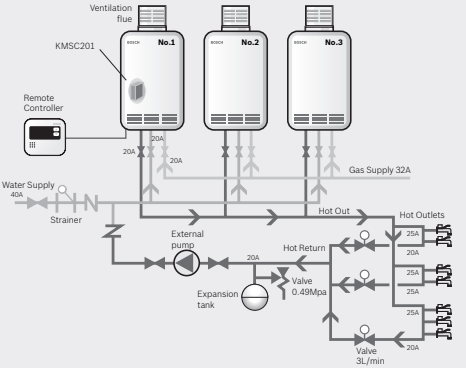
Manifold 2 to 6 units

Bosch 32 models (KM3211WHNG/LP) have the ability to be linked in series (manifolded). For 2 units, the quick connection cable (KMQC0703339) can be used to allow the units to share the work load. 3 to 6 units can be used in rotation with a fully electronic rotation manifold system controller (KMSC201). The system controller allows the work load to be shared evenly between the manifolded units.

* Note: When manifolding 2 or more Bosch 32 models, you are required to install a main controller (RCM3211) for electronic staging.

Manifolds can also be combined with Bosch-Everlast stainless steel tanks (315 ltr storage capacity).

Product diagram



Bosch Commercial combination sizing guide

Bosch 32 Series manifolds can be combined with Bosch-Everlast stainless steel tanks (for tank part numbers see page 14). The table below shows some of the possible burner-tank combinations and the approximate capacities the manifolds can deliver in the 1st and 2nd hour at a 50°C temperature rise.

The Bosch 26e Highflow, along with being the flagship of the domestic range of water heaters, can also be used in commercial applications. One option is to hydraulically manifold these units in conjunction with a Bosch-Everlast storage tank.

System	Tank size	Number of Bosch units	1st hour litres at a 50°C rise	2nd hour litres at a 50°C rise	Gas usage (MJ/h)
26e	315 ltr	1	1095	780	200
26e	315 ltr	2	1875	1560	400
26e	315 ltr	3	2655	2340	600
26e	315 ltr	4	3435	3120	800
26e	315 ltr	5	4215	3900	1000
32	315 ltr	1	1275	960	250
32	315 ltr	2	2235	1920	500
32	315 ltr	3	3195	2880	750
32	315 ltr	4	4155	3840	1000
32	315 ltr	5	5115	4800	1250

There are many more combinations than are listed. Please refer to the Bosch customer contact centre (Australia: 1300 30 70 37; New Zealand: 0800 54 33 52) or visit www.bosch.com.au to find your local Bosch agent.

2.4 Commercial flueing accessories

All internal gas water heaters must be flued in accordance with AS 5601 or NZ 5621. For the Bosch 32 Series there is a horizontal or vertical flue kit available for internal installations.

The maximum flue length for a vertical flue with 1 elbow is 13m.

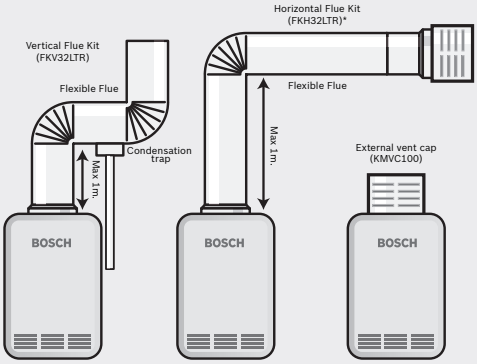
Vertical flue kit
FKV32LTR

- 100mm gas cowl
- 1.5m x 100mm diameter gas flex (three pieces)
- Flue pipe adaptor (three pieces)
- Support struts (two pieces)
- 6mm x 3m condensation hose

Horizontal flue kit
FKH32LTR
(requires vent cap KMVC100)

- 100mm diameter flexible flue, 5 meters long
- flue sleeve
- adjustable wall penetration sleeve (two pieces)
- clamp

Flueing Accessories



* Vent cap KMVC100 required with horizontal flue kit FKH32LTR.

3 Sizing guide

		Climate		
		COLD	MODERATE	TROPICAL
No. of bathrooms	Product Name	Litres	Litres	Litres
1	HydroPower	16	10 or 13	10 or 13
	Pilot	16	10 or 13	10 or 13
	Electronic Highflow	17	17	17
2	HydroPower	–	16	16
	Pilot	–	16	16
	Electronic Highflow	21 or 26	17 or 21 or 26	17 or 21
2+	Electronic Highflow	26	26	26
3+	Commercial Series	32	32	32

Guide only, circumstances may vary. Please consult your retailer for specialist advice in your area.

Cooler climates

For external HydroPower and Pilot range hot water systems the Exogel valve is recommended in areas that drop to 0°C for short periods. In areas prone to extended periods of frost and sub-zero temperatures, only an internal HydroPower model, an internal or external 32 Series model or an external Highflow model are suitable. The 32 Series and the Highflow range come standard with Antifrost protection.

4 Quick installation tips

The installation tips provided in this quick refererence guide are a guide only. Please refer to the latest AS 5601 or NZ 5621 edition and local authority guidelines. Bosch gas hot water systems are to be installed by an authorised person only.

- Select the water heater that best suits the customer's needs.
- Check cold water pressures to ensure they are within the min/max range required. The installation of a pressure limiting valve may be required for pressures above 800kPa (refer to installation manuals).
- Check gas type required.
- Check maximum gas load of installation (if other appliances are or may be installed in the future). This will influence a number of factors such as:
  1. Property gas service size, regulator and gas meter size/capacity and house pipe sizing (natural gas);
  2. Number and size of cylinders, regulator capacity and house pipe sizing (LPG).
- Position the water heater in compliance with AS 5601 / NZ 5621, manufacturers instructions and local authority guidelines.
- Keep hot water piping to a minimum. Consult AS 3500 / NZ 3500 for pipe sizing.
- Mount water heater on an external or internal wall, depending on the water heater model, using fixing capable of supporting the unit weight (see technical specifications).
- Highflow range and 32 Series: Electricity supply (VAC): 230-240, 50Hz (10 amp weatherproof power point recommended within 500 mm of the unit).
- Consult AS 5601/NZ 5621 and determine the correct gas pipe sizing for the installation. (Do not forget to include or make provision for existing or future gas loads such as heating, cooking appliances, etc.)
- Connection of the gas supply to the appliance must be via an approved isolation valve at the unit.
- Refer to technical specifications for the correct gas connection size.
- Purge and flush gas piping prior to connection to unit.
- Connection of cold water piping is via an approved isolation valve.
- Flush cold water piping of debris prior to connection to the unit.
- See technical specifications for cold and hot water connection sizes to the unit.
- Install temperature control pads if desired (available for Highflow and 32 Series). DO NOT ATTACH THE TEMPERATURE CONTROLLER TO ELECTRONIC WATER HEATERS WHILST THE UNIT IS POWERED.
- After completing the installation of the unit, remove the gas test point sealing screw, connect your manometer to the gas inlet test point, turn on the water, gas and (if applicable) power supplies to the unit.
- Operate all other gas appliances with the water heater operating at maximum water flow from the hot tap and confirm that the gas inlet pressure does not drop below the pressure range required (see technical specifications). Isolate gas supply and retighten test point.
- Please refer to installation manuals for full commissioning procedures.
- Confirm that the water heater delivers the temperature the consumer requires, explain the appliance operation to the consumer and hand over the operation instructions. Please leave your contact details with the consumer.

5 Installation regulations

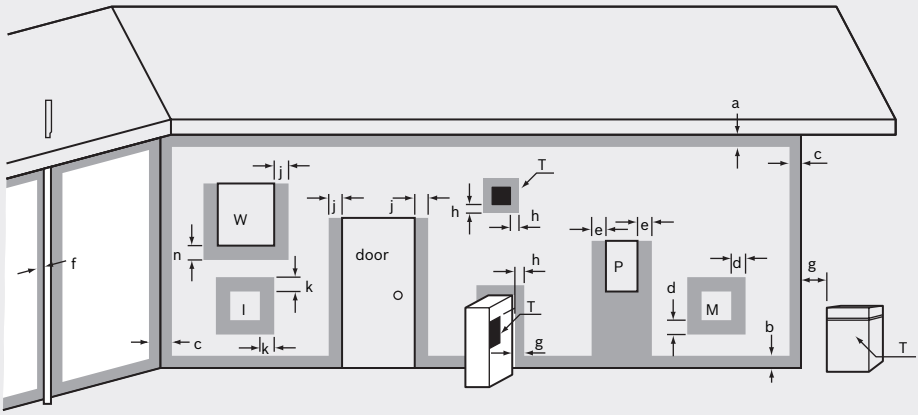
The installation regulations provided in this quick reference guide are a guide only. Please refer to the latest AS 5601/NZ 5621 edition and local authority guidelines.

5.1 Minimum clearance of flue terminals

Natural draft
Bosch hot water systems with natural draft flue terminals are: External and Internal HydroPower ranges as well as the Pilot Ignition range.

Fan assisted
Hot water systems with fan assisted flue terminals in the Bosch product range are: Highflow range and Bosch 32 Series.

Installation diagram



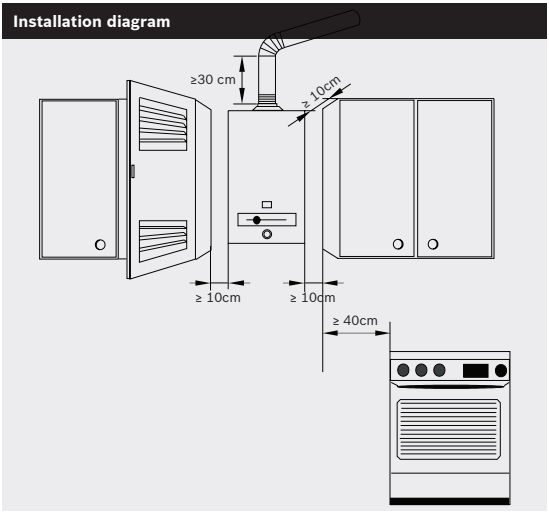
T = flue terminal
I = Mechanical air inlet
M = Gas meter
P = Electricity meter or fuse box
W = Openable window
Shading indicates prohibited areas for flue terminals

	Item	Minimum Clearance (mm) Natural Draft	Minimum Clearance (mm) Fan Assisted
	Below eaves, balconies and other projections		
a	Appliances up to 50 MJ/h input	300	200
	Appliances over 50 MJ/h input	500	300
b	From the ground, above a balcony or other surface*	300	300
c	From a return wall or external corner*	500	300
d	From a gas meter (M)	1000	1000
e	From an electricity meter or fuse box (P)	500	500
f	From a drain pipe or soil pipe	150	75
g	Horizontally from any building structure or obstruction facing a flue terminal	500	500
h	From any other flue terminal, cowl, or combustion air intake*	500	300
j	Horizontally from an opening window, door, non-mechanical air inlet. Or other opening into a building with the exception of sub floor ventilation		
	Appliances up to 150 MJ/h	500	300
	Appliances over 150MJ/h input up to 200 MJ/h input	1500	300
	Appliances over 200 MJ/h input up to 250 MJ/h input*	1500	500
	Appliances over 250 MJ/h*	1500	1500
	All fan-assisted flue applications, in the direction of discharge	–	1500
k	From a mechanical air inlet, including spa blower	1500	1000
n	Vertically below an openable window, non-mechanical air inlet, or any other opening into a building with the exception of sub-floor ventilation:		
	Space heaters up to 50 MJ/h	150	150
	Other appliances up to 50 MJ/h	500	500
	Appliances over 50 MJ/h and up to 150 MJ/h input	1000	1000
	Appliances over 150 MJ/h input	1500	1500

** Unless appliance is certified for closer installation.*

5.2 Installation locations for internal continuous flow gas hot water systems

Installation diagram



Internal continuous flow gas hot water systems in the Bosch product range are: Internal HydroPower range, internal installations of the 32 Series (external installations also possible).

Please note that appropriate flueing is required for internal installations. Prohibited internal installation locations for instantaneous water heaters are: bedrooms, bathrooms, toilet rooms, or combined living/sleeping rooms. Please refer to AS 5601/NZ 5621, installation instructions, and local authority guidelines.

This diagram of installation locations serves as a guide only. Please refer to AS 5601/NZ 5621 and local authority guidelines.

6 Temperature controllers for Highflow and 32 Series

Bosch recommends the installation of temperature controllers with the Highflow range and the 32 Series. Fault codes displayed on the controller make fault diagnosis as easy as possible. They also allow temperature control accurate to the single degree.

6.1 Highflow temperature controllers

Two different types of Highflow temperature controllers are available: Standard* and Premium. There is a main and a bathroom controller of each type as well as a common sub-controller, which can be used in conjunction with both Standard and Premium controllers.
Only controllers of the same type can be used together; It is not possible to mix Standard and Premium main and bathroom controllers.

A maximum of 4 controllers can be installed with the Highflow range – 1 main controller, 1 bathroom controller and 2 sub-controllers.

Highflow temperature controllers also offer the Bosch Water Saver function, which either stops the water flow automatically (Premium controllers) or sounds an audible alarm (Standard controllers) once the pre-defined amount of water has been delivered.

If several controllers are used, Bosch recommends a parallel installation; all single wires going back to the water heater. The maximum length of any cable should be 20m. For installation and operation instructions, please refer to the installation and operation manual.
DO NOT ATTACH THE TEMPERATURE CONTROLLER TO THE HIGHFLOW WATER HEATER WHILST THE UNIT IS POWERED.

Part numbers

Controller name	Part number
Standard main controller	YPR**M66**XB*
Standard bathroom controller	YPR**S66**XB*
Premium main controller	YPR**M67**XB
Premium bathroom controller	YPR**S67**XB
Sub-controller	YPR**P62**XB

** Standard controllers available in Australia only.*

6.2 32 Series controllers

As with Highflow temperature controllers, 32 Series controllers offer temperature control accurate to the single degree.

Coupled with the 32Q model (KM3211WHQNG/LP), the main controller offers a circulation mode, which includes the option to time the circulation of hot water to the water outlets, e.g. for peak usage times. The main controller (RCM3211) is included with the 32Q.

A maximum of 3 controllers can be fitted with Bosch 32 models (KM3211WHNG/LP) – 1 main controller and 2 sub-controllers.

For installation and operation instructions, please refer to the installation and operation manual.
DO NOT ATTACH THE TEMPERATURE CONTROLLER TO THE HIGHFLOW WATER HEATER WHILST THE UNIT IS POWERED.

Part numbers

Controller name	Part number
Main controller	RCM3211
Sub-controller	RCS3211

7 Frequently asked questions (FAQs)

▶ **Are water flow restrictors compatible with Bosch hot water systems?**
Yes, but they must allow a minimum flow rate of 9 litres per minute.

▶ **Are Bosch hot water systems compatible with all taps and shower heads?**
They are compatible with most taps but some flick mixer taps have a flow rate that is below the minimum required for operation.

▶ **What size of LPG gas cylinder should be used with Bosch hot water systems?**
HydroPower and Pilot range models with a flow rate of 10 and 13 litres should be connected to at least one 45kg LPG cylinder. HydroPower and Pilot range models with a flow rate of 16 litres as well as Highflow and 32 Series hot water systems should be connected with two 45kg cylinders with an auto changeover regulator.

▶ **How often should the gas appliance be serviced?**
All domestic gas appliances should be serviced at intervals not exceeding 2 years.

Commercial gas hot water applications should be serviced at intervals never exceeding 1 year.

▶ **Which tempering valve is compatible with which Bosch hot water system?**
All continuous flow units must be connected with a high performance tempering valve (green cap).

▶ **Can the factory-set maximum temperature of Highflow (55°C) and 32 Series models (60°C) be changed?**
For safety reasons, the maximum temperature is factory-set at 55°C with the Highflow range and at 60°C with the 32 Series. However, maximum temperatures can be increased up to 75°C (Highflow range) and 83°C (32 Series), if necessary. We recommend that the maximum temperature should only be adjusted by an authorised person. Please refer to the installation and operation manual.

▶ **What is the maximum number of temperature controllers that can be used with a Highflow range installation?**
4 temperature controllers – 1 main, 1 bathroom and 2 sub-controllers. Premium and Standard main and bathroom controllers cannot be mixed.

Bosch 32 models (KM3211WHNG/LP) can be used with up to 3 temperature controllers - 1 main controller and 2 sub-controllers. Bosch 32Q models (KM3211WHQNG/LP) include 1 main controller as standard.

▶ **Is the setting of gas pressures done by the manufacturer?**
No. Even though all Bosch units are tested in the factory; Gas inlet pressures and burner pressures (for the mechanical units) need to be set and checked at every service to ensure correct operation.

▶ **What does the Bosch warranty cover?**
The Bosch warranty covers manufacturing defects only. If the problem has been caused by poor installation or other factors, depending on the case, the consumer or installer is then responsible for the costs.

▶ **Why is the installation position so important?**
The positioning of the water heater is very important as it may affect water flow and lag times. Safety regulations are another aspect that has to be taken into consideration when installing the appliance.

8 Contact

Our hot water systems are designed for long life and high performance. However, if a problem does arise, our expert customer service team and network of authorised service agents in Australia and New Zealand will be ready to assist you.

8.1 Bosch Thermotechnology Australia

Customer Contact Centre:
Hotline: 1300 30 70 37
Fax: 1300 30 70 38

Mailing address:
Robert Bosch (Australia) Pty. Ltd.
Thermotechnology, Technical Department
Locked Bag 66
Clayton South VIC 3169

Internet:
www.bosch.com.au
hot.water@au.bosch.com

8.2 Bosch Thermotechnology New Zealand

Customer Contact Centre:
Hotline: 0800 54 33 52
Fax: 0800 54 33 55

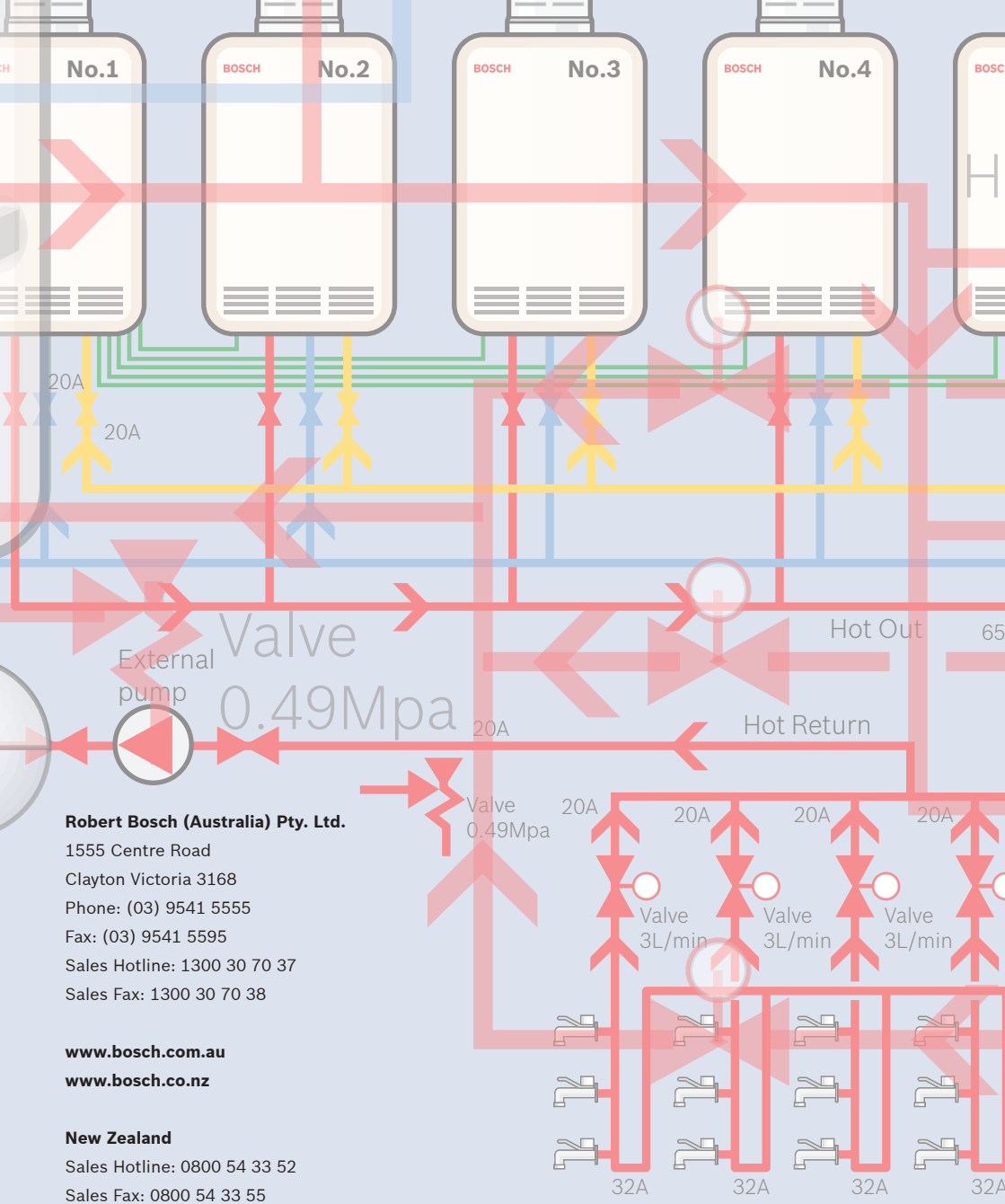
Mailing address:
Robert Bosch Thermotechnology
P.O. Box 19026
Avondale Auckland 1746

Internet:
www.bosch.co.nz
hot.water@au.bosch.com

8.3 For your own records

Your Bosch Sales Representative
Name:
Phone:
Mobile:
Fax:
Mailing Address:

Other Bosch Contacts:
Name:
Phone:
Mobile:
Fax:
Mailing Address:



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